



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/660,837	(	09/12/2003	Joerg Wilken	H26806 (P25,583-A USA) 7861 EXAMINER	
128	7590	09/27/2005			
		ERNATIONAL IN	LEE, SUSANNAH E		
101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245				ART UNIT	PAPER NUMBER
				1626	1626

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-		Application No.	Applicant(s)	_
		10/660,837	WILKEN ET AL.	
	Office Action Summary	Examiner	Art Unit	_
		Susannah Lee	1626	
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet with the c	orrespondence address	
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLEHEVER IS LONGER, FROM THE MAILING Dosions of time may be available under the provisions of 37 CFR 1.5 SIX (6) MONTHS from the mailing date of this communication. The period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statutively received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b).	MATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	l.  lely filed  the mailing date of this communication.  O (35 U.S.C. § 133).	
Status				
1)🖂	Responsive to communication(s) filed on <u>08 L</u>	<u> December 2004</u> .		
	· · · · · · · · · · · · · · · · · · ·	s action is non-final.		
3) 🗌	Since this application is in condition for allowa	nce except for formal matters, pro	secution as to the merits is	•
	closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.	
Dispositi	on of Claims			
4)⊠	Claim(s) 1-27 is/are pending in the application	<b>l.</b>		
•	4a) Of the above claim(s) is/are withdra	wn from consideration.		
5)	Claim(s) is/are allowed.			
6)	Claim(s) is/are rejected.			
7)	Claim(s) is/are objected to.			
8)⊠	Claim(s) <u>1-27</u> are subject to restriction and/or	election requirement.		
Applicati	on Papers			
9)	The specification is objected to by the Examino	er.		
10)	The drawing(s) filed on is/are: a) ☐ acc	cepted or b) objected to by the B	Examiner.	
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).	
	Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).	
11)	The oath or declaration is objected to by the E	xaminer. Note the attached Office	Action or form PTO-152.	
Priority u	ınder 35 U.S.C. § 119		•	
a)(	Acknowledgment is made of a claim for foreign All b) Some * c) None of:  1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Burea see the attached detailed Office action for a list	ts have been received. ts have been received in Applicati prity documents have been receive tu (PCT Rule 17.2(a)).	on No ed in this National Stage	
Attachmen	t(s)			
	e of References Cited (PTO-892)	4) Interview Summary		
3) Infor	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 r No(s)/Mail Date	Paper No(s)/Mail Da  5) Notice of Informal P  6) Other:	ite atent Application (PTO-152)	

Application/Control Number: 10/660,837

Art Unit: 1626

## **DETAILED ACTION**

Page 2

Claims 1-27 are currently pending in the instant application.

#### Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9 drawn to a process for separating a first enantiomer of an optically active organic compound from a mixture comprising a first enantiomer and a second enantiomer, the process comprising the steps recited in claim 1.
- II. Claims 10-12 drawn to a process for isolation of a first enantiomer of an optically active organic compound in high optical purity from a composition comprising a first enantiomer and a second enantiomer of the compound, the process comprising the steps recited in claim 10.
- III. Claims 13-15 drawn to a process for separation of (R) 3-hydroxy-3-(2-phenylethyl)-hexanoic acid from a mixture comprising (R) 3-hydroxy-3-(2-phenylethyl)-hexanoic acid and (S) 3-hydroxy-3-(2-phenylethyl)-hexanoic acid, the process comprising the steps recited in claim 13.
- IV. Claims 16-18 and 24-26 drawn to a process comprising a multi-step synthetic scheme for synthesizing [R-(R\*,R\*)]-N-[3-[1-5,6-dihydro-4-hydroxy-2-oxo-6-(2-phenylethyl)-6-propyl-2H-pyran-3-yl]propyl]phenyl]-5-(trifluoromethyl)-2-pyridinesulfonamide from (R) 3-hydroxy-3-(2-phenylethyl)-hexanoic acid, the process comprising the steps recited in claim 16.
- V. Claims 19-23 drawn to a process comprising a multi-step reaction sequence for synthesizing [R-(R\*,R\*)]-N-[3-[1-5,6-dihydro-4-hydroxy-2-oxo-6-(2-

Application/Control Number: 10/660,837

Art Unit: 1626

phenylethyl)-6-propyl-2H-pyran-3-yl]propyl]phenyl]-5-(trifluoromethyl)-2-pyridinesulfonamide(the antiviral compound) from (R) 3-hydroxy-3-(2-phenylethyl)-hexanoic acid, the process comprising the steps recited in claim 19.

VI. Claim 27 drawn to a process for synthesizing [R-(R\*,R\*)]-N-[3-[1-5,6-dihydro-4-hydroxy-2-oxo-6-(2-phenylethyl)-6-propyl-2H-pyran-3-yl]propyl]phenyl]-5- (trifluoromethyl)-2-pyridinesulfonamide, the process comprising the steps recited in claim 27.

Where an election of Group I or II is made, an election of a single compound is further required, wherein the "optically active organic compound" is selected. For example, the optically active organic compound can be [R-(R\*,R\*)]-N-[3-[1-5,6-dihydro-4-hydroxy-2oxo-6-(2-phenylethyl)-6-propyl-2H-pyran-3-yl]propyl]phenyl]-5-(trifluoromethyl)-2pyridinesulfonamide. In the instant case, upon election of a single compound, the Office will review the claims and disclosure to determine the scope of the independent invention encompassing the elected compound (compounds which are so similar thereto as to be within the same inventive concept and reduction to practice). The scope of an independent invention will encompass all compounds within the scope of the claim, which fall into the same class and subclass as the elected compound, but may also include additional compounds, which fall in related subclasses. Examination will then proceed on the elected compound AND the entire scope of the invention encompassing the elected compound as defined by common classification. A clear statement of the examined invention, defined by those class(es) and subclass(es) will be set forth in the first action on the merits. Note that the restriction requirement will not be made final until such time as applicant is informed of the full scope of compounds along with (if

Page 4

Art Unit: 1626

appropriate) the process of using or making said compound under examination. This will be set forth by reference to specific class(es) and subclass(es) examined. Should applicant traverse on the ground that the compound are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the compound to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other.

All compounds falling outside the class(es) and subclass(es) of the selected compound and any other subclass encompassed by the election above will be directed to nonelected subject matter and will be withdrawn from consideration under 35 U.S.C. 121 and 37 C.F.R. 1.142(b). Applicant may reserve the right to file divisional applications on the remaining subject matter. (The provisions of 35 U.S.C. 121 apply with regard to double patenting covering divisional applications.)

Applicant is reminded that upon cancellation of claims to a nonelected invention, the inventions must be amended in compliance with 37 C.F.R. 1.48(b) if one of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 C.F.R. 1.48(b) and by the fee required under 37 C.F.R. 1.17(i).

Markush claims must be provided with support in the disclosure for each member of the Markush group. See MPEP 608.01(p). Applicant should exercise caution in making a selection of a single member for each substituent group on the base molecule to be consistent with the written description.

Application/Control Number: 10/660,837 Page 5

Art Unit: 1626

## Rationale Establishing Patentable Distinctiveness Within Each Group

Each Group listed above is directed to or involves the use of compounds which are recognized in the art as being distinct from one another because of their diverse chemical structure, their different chemical properties, modes of action, different effects and reactive conditions (MPEP 806.04, MPEP 808.01). Additionally, the level of skill in the art is not such that one invention would be obvious over the other invention (Group), i.e. they are patentable over each other. Chemical structures, which are similar, are presumed to function similarly, whereas chemical structures that are not similar are not presumed to function similarly. The presumption even for similar chemical structures though is not irrebuttable, but may be overcome by scientific reasoning or evidence showing that the structure of the prior art would not have been expected to function as the structure of the claimed invention. Note that in accordance with the holding of Application of Papesch, 50 CCPA 1084, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) and In re Lalu, 223 USPQ 1257 (Fed. Cir. 1984), chemical structures are patentably distinct where the structures are either not structurally similar, or the prior art fails to suggest a function of a claimed compound would have been expected from a similar structure.

The above groups represent general areas wherein the inventions are independent and distinct, each from the other because of the following reasons:

Inventions I - VI are unrelated processes of making. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP §806.04, MPEP §808.1). In the instant case the different inventions cannot be used together as each process uses different starting

Art Unit: 1626

materials, reagents, reaction conditions, etc... If Applicant disagrees, Applicant can submit the reasons for why they are the same and Examiner will consider grouping them together.

In addition, because of the plethora of classes and subclasses (for example there are an infinite number of possible classes and subclasses for "optically active organic compound") in each of the Inventions, a serious burden is imposed on the examiner to perform a complete search of the defined areas. Therefore, because of the reasons given above, the restriction set forth is proper and not to restrict would impose a serious burden in the examination of this application.

### Advisory of Rejoinder

The following is a recitation of M.P.E.P. 821.04, Rejoinder:

Where product and process claims drawn to independent and distinct inventions are presented in the same application, applicant may be called upon under 35 U.S.C. 121 to elect claims to either the product or process. See MPEP § 806.05(f) and § 806.05(h). The claims to the nonelected invention will be withdrawn from further consideration under 37 CFR 1.142. See MPEP § 809.02(c) and § 821 through § 821.03. However, if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims, which depend from or otherwise include all the limitations of the allowable product claim will be rejoined.

Where the application as originally filed discloses the product and the process for making and/or using the product, and only claims directed to the product are presented for examination, when a product claim is found allowable, applicant may present claims directed to the process of making and/or using the patentable product by way of amendment pursuant to 37 CFR 1.121. In view of the rejoinder procedure, and in order to expedite prosecution, applicants are encouraged to present such process claims, preferably as dependent claims, in the application at an early stage of prosecution. Process claims, which depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance. Amendments submitted after final rejection are governed by 37 CFR 1.116. Process claims which do not depend from or otherwise include the limitations of the patentable product will be withdrawn from consideration, via an election by original presentation (see MPEP § 821.03). Amendments submitted after allowance are governed by 37 CFR 1.312. Process claims which depend from or otherwise include all the limitations of an allowed product claim and which meet the requirements of 35 U.S.C. 101, 102, 103, and 112 may be entered.

Where product and process claims are presented in a single application and that application qualifies under the transitional restriction practice pursuant to 37 CFR 1.129(b), applicant may either: (A) elect the invention to be searched and examined and pay the fee set forth in 37 CFR 1.17(s) and have the additional inventions searched and examined under 37 CFR 1.129(b)(2); or (B) elect the invention to be searched and examined and not pay the additional fee (37 CFR 1.129(b)(3)). Where no additional fee is paid, if the elected invention is directed to the product and the claims directed to the product are subsequently found patentable, process claims which either depend from or include all the limitations of the allowable product will be rejoined. If applicant chooses to pay the fees to have the additional inventions searched and examined pursuant to 37 CFR 1.129(b)(2) even if the product is found allowable, applicant

would not be entitled to a refund of the fees paid under 37 CFR 1.129(b) by arguing that the process claims could have been rejoined. 37 CFR 1.26(a) states that "[T]he Commissioner may refund any fee paid by mistake or in excess of that required. A change of purpose after the payment of a fee...will not entitle a party to a refund of such fee..." In this case, the fees paid under 37 CFR 1.129(b) were not paid by mistake nor paid in excess, therefore, applicant would not be entitled to a refund. In the event of rejoinder, the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101,102, 103, and 112. If the application containing the rejoined claims is not in condition for allowance, the subsequent Office action may be made final, or, if the application was already under final rejection, the next Office action may be an advisory action. Form paragraphs 8.42 through 8.44 should be used to notify applicant of the rejoinder of process claims which depend from or otherwise include all the limitations of an allowable product claim.

In the event of rejoinder, the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104 - 1.106. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. If the application containing the rejoined claims is not in condition for allowance, the subsequent Office action may be made final, or, if the application was already under final rejection, the next Office action may be an advisory action.

The following is a recitation from paragraph five, "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. §103(b)" (1184 TMOG 86(March 26, 1996)):

"However, in the case of an elected product claim, rejoinder will be permitted when a product claim is found allowable and the withdrawn process claim depends from or otherwise includes all the limitations of an allowed product claim. Withdrawn process claims not commensurate in scope with an allowed product claim will not be rejoined." (emphasis added)

Therefore, in accordance with M.P.E.P. 821.04 and In re Ochiai, 71 F.3d 1565, 37 USPQ 1127 (Fed. Cir. 1995), rejoinder of product claims with process claims commensurate in scope with the allowed product claims will occur following a finding that the product claims are allowable. Until, such time, a restriction between product claims and process claims is deemed proper. Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution to maintain either dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

A telephone call was made to Ms. Deborah Chess on 09/07/2005 to request an oral election to the above restriction requirement, but did not result in an election being made.

Application/Control Number: 10/660,837 Page 8

Art Unit: 1626

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susannah Lee whose telephone number is (571) 272-6098. The examiner can normally be reached on M-F, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susannah Lee Patent Examiner, AU 1626

Date: 09/20/05

KAMAL A. SAEED, PH.D.

Kanal Sneed